

REMARKS

In the Official Action mailed on **18 January 2006** the Examiner reviewed claims 1-21. Claims 1-3, 8-10 and 15-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Haggar et al (USPub 2002/0091904, hereinafter “Haggar”) in view of Shaylor (USPub 2002/0108025, hereinafter “Shaylor”). Claims 4-7, 11-14, and 18-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Haggar in view of Shaylor in view of Otis (USPub 2002/0099765, hereinafter “Otis”).

Rejections under 35 U.S.C. §103(a)

Independent claims 1, 8, and 15 were rejected as being unpatentable over Haggar in view of Shaylor. Examiner avers that Haggar teaches “reserving a guaranteed amount of heap memory for a task from a common heap in a multitasking system” at paragraph [0006], and “if heap memory is not available in the guaranteed amount of heap memory, checking if surplus heap memory is available in the common heap” at paragraph [0034].

Applicant respectfully points out that Haggar does not mention tasks or tasking (see Haggar, FIG. 2 and paragraph [0046]). Haggar discusses separating the memory pool into storage blocks and handles in FIG. 2 and paragraphs [0006] and [0046], and reallocating the memory between the handle and the storage block area while not allocating memory outside of the bounds of the heap. Note that Haggar discloses a single tasking system that has no concept of allocating guaranteed amounts of memory to individual tasks (there is only one task to allocate memory to).

While Shaylor presents a multitasking system, Shaylor **does not** allocate a guaranteed amount of heap memory to each task, and **does not** check if additional heap memory is available in the common heap if a task requests more heap memory than is available in the guaranteed amount of heap memory.

In contrast, the present invention provides a technique to **allocate a guaranteed amount of heap memory** to each task in a multi-tasking system, and if a task requests more heap memory than is available in the guaranteed amount of heap memory, to **determine if additional heap memory is available** in the common heap to allocate to the task to satisfy the request (see paragraphs [0048]-[0053] of the instant application). This is beneficial because it provides a technique for each task to operate with a guaranteed amount of memory and to, if memory is available in the common heap, to increase the amount of allocated memory, thereby delaying garbage collection.

Accordingly, Applicant has amended independent claims 1, 8, and 15 to clarify that the present invention allocates a guaranteed amount of heap memory to each task in a multi-tasking system, and if a task requests more heap memory than is available in the guaranteed amount of heap memory, determines if additional heap memory is available in the common heap to allocate to the task to satisfy the request. These amendments find support in paragraphs [0048]-[0053] of the instant application.

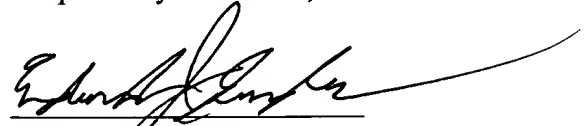
Hence, Applicant respectfully submits that independent claims 1, 8, and 15 as presently amended are in condition for allowance. Applicant also submits that claims 2-7, which depend upon claim 1, claims 9-14, which depend upon claim 8, and claims 16-21, which depend upon claim 15, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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